

Date: Wednesday, 02/04/2008 3:39:36 PM
 User: Julie Lecocq

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services			Drawing Name	: CROSSTUBE EXTRUSION (412 AFT)		
Job Number	: 38342			Part Number	: D6009129		
Estimate Number	: 10030			Drawing Number	: D6009 REV A		
P.O. Number	:			Project Number	: N/A		
This Issue	02/04/2008	S.O. No.	:	Drawing Revision	: A		
Prsh Rev.	: NC			Material	:		
First Issue	1 /	Type	LANDING GEAR	Due Date	: 26/09/2008		
Previous Run	: 34691			Qty:	28	Um:	Each
Written By	:			Comment	: Est Rev:A 01.08.17 New Issue SM		
Checked & Approved By	: JD 08.4.03						

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING
Comment: PURCHASING Issue P/O: <u>6063</u> <u>28/04/04</u> (28) a) Order as per Dwg D6009 b) Material: 3.500 x 0.625 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube c) Minimum ultimate tensile strength = 77 ksi d) Minimum tensile yield strength = 66 ksi e) Tolerance are per ASTM B210 (see details on Dwg D6009) f) Material certification required		
2.0	D6009129P	Crosstube Material
Comment: Qty.: 1.0000 Each(s)/Unit Total : 28.0000 Each(s) Crosstube Material		
3.0	PACKAGING 1	PACKAGING RESOURCE #1
Comment: PACKAGING RESOURCE #1 Receive & Inspect For Transit Damage Ensure material certification is attached (M109279) 18 08/09/16 (31)		
4.0	QC6	DIMENSIONAL CHECK
Comment: DIMENSIONAL CHECK Ensure Material certification comply to Dwg D 08/09/17 (31) counter		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Seq. #:	Machine Or Operation:	Description :
5.0	HAND FINISHING1	HAND FINISHING RESOURCE #1 <i>M4 S 8917</i>
6.0	PACKAGING 1	PACKAGING RESOURCE #1 <i>08-09-17 X3</i>
7.0	QC21	FINAL INSPECTION/W/O RELEASE <i>08/09/18 XJ</i>

Job Completion



MF 08-09-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

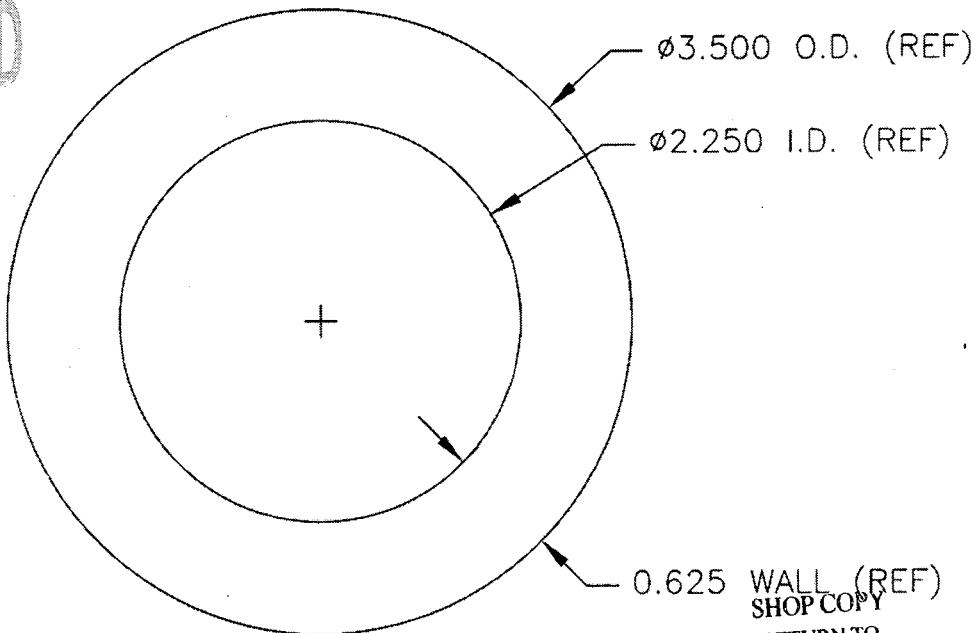


RECEIVED
DRAFTS

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A
		D6009	SHEET 1 OF 1
DATE	TITLE		SCALE
01.08.16	CROSSTUBE MATERIAL		1:1
A	01.08.16	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.08.17



NOTES

- 1) D6009-XXX CROSSTUBE

LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 129" LONG TUBE: D6009-129

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38342

- 2) MATERIAL: 3.500 OD x 0.625 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.008 MEAN (± 0.016 INCLUDING OVALITY)
WALL: ± 0.020 MEAN (± 0.063 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.188/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

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Packinglist ALUnna AG

Customer PO	PO. 00006063
ALUnna ref. no.	29104/3
Date:	08.21.08

We hereby declare that the wooden packing material are totally free from bark and apparently

free from live plant pests

Boxmarking:

Dart Aerospace PO. 00006063
Made in Germany
Dest, Hawkesbury Ont. Canada

1,122 m³

1,122 m³

Abnahmeprüfzeugnis 3.1 - EN 10204:2004

Inspection Certificate 3.1 - EN 10204:2004 / Certificat de Reception 3.1- EN 10204:2004

Kunde: Dart Aerospace Ltd.

Client:

1270 Aberdeen Street
K6A1K7 Hawkesbury, ON Canada

Zeugnisnummer: 1260/08

Cert No.: / No. du certificat:

Produkt: Rohre nahtlos gepresst

Product / Produit: Tubes seamless extruded

Bestellnummer: PO00006063

Order No. / No. de commande

Spezifikation: AMS - QQ - A - 200/11E; Spezifikation Dart Aerospace D6009

Specification:

Auftrag: 29104/3

Our Reference/Notre Reference:

Werkstoff: 7075

Alloy/Alliage:

Zustand: T 6511

Temper/État

Abmessung 3,500 INCH x 2,250 INCH x 0,625 INCH x 129,000 INCH

Size / Dimension D6009-129 3.500 X 0.625 X 129

Kennzeichnung ALUnna - Cert No. 1260/08 - 7075 - T6511 - Cast No. 81992 - AMS - QQ - A - 200/11 - 3.500" OD x 0.625" Wall-
Marking/Marquage: Heat Lot No. 1835 - ALUnna Order Conf. No. 29104/3-1 - P.O. 00006063

Lieferung

Delivered Material / Matériel délivré:

Stück

kg

31 1039,00

*S
Soberit*

1. Chemische Analyse

Chemical Analysis / analyse chimique

Charge/ Cast No.	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
	min.	0,40	0,50	1,2	0,30	2,1	0,18	5,1	0,20				
81992	0,13	0,18	1,45	0,04	2,47	0,18	5,8	0,03	0,01	0,02	0,01	0,01	0,01

2. Mechanische Eigenschaften

Mechanical Properties / Valeurs Mécaniques

Anforderungen Requirements	tensile (Rm) ksi	yield (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat Lot No.
	min. max.	77,0	66,0			
1	85,115	78,880	10,0		166	1835 - 31 pcs.
2	82,505	75,400	12,0		164	
3	83,520	76,560	11,0		169	

RMS: outside 25 - max. 15,06 μ "

**Ergebnis der
Prüfungen:** Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results: We confirm that the delivery has been tested and applies to the agreements made on receipt of the order

Resultats: Nous confirmons que la livraison a été contrôlée et correspond avec les conventions faites à la réception de la commande

21.08.2008

/ Duda



Certified acc. DIN EN ISO 9001:2000 and DIN EN 9100:2003

valid until 2010-11-11

Cert.-Req. No.: 001959 QM; 001959 ASH

 ALUnna

Abnahmebeauftragter

Aluminiumwerk Unna AG, Uelzener Weg 36, 59425 Unna, Germany